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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,928	08/20/2003	Michael D. Ellis	81788-4200	8278
28765	7590	02/24/2006	EXAMINER	
WINSTON & STRAWN LLP 1700 K STREET, N.W. WASHINGTON, DC 20006			CHOW, CHARLES CHIANG	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/645,928	ELLIS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Charles Chow	2685	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2685

### **Detailed Action**

1. Acknowledgement of applicant's claim election for Group I, claims 1-26, amendment received 12/15/2005.

### **Title**

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title, "Enhanced Radio System and Method", does not include the major key features of simultaneously processing & storing of the multiple radio signal portions for later selection.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-10, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Morewitz (US 5,457,815).

Regarding **claim 1**, Morewitz has taught an apparatus [ 100, Fig. 1] for processing multiple radio signals simultaneously [ the simultaneously process radio signals at radios 104, 106; that is while radio 106 scans for radio stations to match RDBS data of user criteria, categorical portions, the radio 104 simultaneously tracks RDBS data for FM-1 at the same time. When found at 104, then, to switch station at radio 102 to new radio station, having user criteria, from FM-1; Fig. 2, col. 1, lines 57-65 & col. 5, line 45 to col. 6, line 8 ], said apparatus 100 comprising

Art Unit: 2685

(a) a radio receiver module having at least two radio receivers [104, 106, 102], each receiver capable of continuously receiving a separate unrelated radio signal [ abstract, Fig.1, the 104 continuously searching, receiving, separate unrelated radio signal to be matched to user criteria which is different from radio 106 tracking for a different radio station FM-1, col. 5, line 45 to col. 6, line 8];

(b) a storage module [112, 114] having a capacity to simultaneously store in a buffer each radio signal received by the radio receiver module for later output by selection of a user [ storages 112, 114 for simultaneously storing RDBS data from 104, 106 & transferring to long term RAM 120 for recall later in col. 4, lines 8-19; col. 5, lines 22-26],

(c) a control module having a programmable selection scheme to control functions including received radio signals [ the control function 122 for programmable selection scheme to control received radio signal from station tuning, seek, stop, scan in col. 3, lines 27-42; the control module 126 pushbutton for store, recall, erase, continue, & tune to match 126e, Fig. 1, col. 3, lines 43-50 & keypad 130];

stored radio signals and portions thereof [106 scanning to match categorical portions, artist name, song title, program type code, col. 4, lines 20-40; storing RDBS data categorical portion into storage 114, 120, col. 4, lines 22-26; particular portions in col. 1, lines 12-14], and

an output of the stored radio signals and portions thereof [ prompts to user a match occurs for user input to store or erase, recall 126b for the RDBS portion in col. 3, lines 43-50];

wherein a user can select a stored radio signal from the buffer in the storage module for the output [ the user recalls from memory RAM 120, col. 4, lines 14-20; user retrieves selected portions from long term memory in col. 7. lines 23-30].

Art Unit: 2685

Regarding **claim 3**, Morewitz teaches the apparatus 100, wherein the output further comprises a signal for a storage medium [ the output signal from store 126a, Fig. 1].

Regarding **claim 4**, Morewitz teaches the apparatus 100, wherein the programmable selection scheme further comprises a user selectable output of a previously stored portion of a radio signal [ the user recalls from memory RAM 120, col. 4, lines 14-20; user retrieves selected portions from long term memory in col. 7. lines 23-30].

Regarding **claim 5**, Morewitz teaches an apparatus 100, wherein the programmable selection scheme further comprises selecting received radio signals based on pre-selected radio signals [ the user enters, reselects, categorical criteria portion, programmable scheme, for station search, col. 4, lines 20-40].

Regarding **claim 6**, Morewitz teaches an apparatus 100, wherein the programmable selection scheme further comprises selecting received radio signals based on time of output algorithms [ the date code in RDBS in col. 1, lines 30-34, to match. col. 4, line 23-26].

Rgarding **claim 7**. Morewitz teaches the apparatus 100 & wherein the programmable selection scheme further comprises selecting received radio signals based on a sequential scan of available radio signals [ continue to next frequency in col. 46-51] and a storing of each scanned radio signal in a buffer of the storage module up to a buffer limit [ the user decide to change frequency & store into long term RAM in col. 5,lines 14-26], and

Simultaneously outputting a selected radio signal [ simultaneously re-tune 102 in col. 5, lines 14-20 & outputting the selected match radio signal from standard volume controlled FM radio 102 with audio in col. 3, lines 6-10],

Regarding **claim 8**, Morewitz teaches an apparatus 100 & further comprising a user input module [130] for storing a table of user listening preferences [ preferred table for one or more categories in col. 3, lines 38-40 & col. 4, lines 20-25 & col. 5, lines 14-26; the long

Art Unit: 2685

term RAM 120 stores the list, table of matched stations, if not erase by 126c].

Regarding **claim 9**, Morewitz teaches an apparatus 100 & further comprising a recognition module to recognize an imbedded code in a received radio signal [ the matching, recognizing, RDBS code, col. 4, lines 25-40; RDBS category code in col. 1, lines 31-53].

Regarding **claim 10**, Morewitz teaches the apparatus 100 & further comprising a user input module [130, col. 2, lines 60-62 & col. 4, lines 24-26 ] for storing a table of user listening preferences [ previously entered by user & table for one or more categories & other stations in col. 3, lines 38-40 & col. 4, lines 20-25],

wherein the user listening preference identifiers are derivable from the imbedded code [ the RDBS category codes in col. 1, lines 31-53 & col. 4, lines 25-40], thereby enabling an output based on the user listening preferences [ output to FM 102 to match user selected criteria having more categories & other stations in col. 4, lines 25-40]

Regarding **claim 20**, Morewitz teaches an apparatus 100 for processing multiple radio signals simultaneously [abstract, col. 1, lines 57-65], said apparatus 100 comprising

(a) a radio receiver [Fig. 1] module having at least two radio receivers [104, 106, 102], each receiver capable of continuously receiving a separate unrelated radio signal [ abstract, Fig.1, the 104 continuously receiving, searching for, separate unrelated radio signal to be matched to user criteria while 106 tracking a different radio station col. 5, line 45 to col. 6, line 8];

(b) a storage module [112, 114] having a capacity to simultaneously store in a buffer each radio signal received by the radio receiver module for later output by selection of a user [storages 112, 114 for simultaneously storing RDBS data from 104, 106 & transferring to long term RAM 120 for recall later in col. 4, lines 8-19; col. 5, lines 22-26], and

Art Unit: 2685

(c) a user input module [130, col. 2, lines 60-62] for storing a table of user listening preferences [ storing one or more categories & other stations he could enter preferred in col. 4, lines 23-40, the retrieving selected portions from long term memory, in col. 7, lines 23-30, as the table of preferences].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morewitz in view of Lee (US 5,671,195).

Regarding **claim 2**, Morewitz teaches standard volume controlled FM radio 102 with audio & speaker 125 [ col. 3, lines 6-10, Fig. 1], but fail to teach the output further comprises an audio signal for a sound generating device.

Lee teaches these features [ the sound output unit 60 outputting audio based on 65 for the selected radio reception or information reproduced from recording, col. 6, lines 11-29], in order to select preferred audio to play. Obviously, Therefore, It would have been for one of ordinary skill in the art at the time of invention to upgrade Morewitz with Lee's sound output unit, in order to select preferred audio to play.

5. Claims 11, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morewitz in view of Lert, Jr. et al. (US 4,677,466).



Regarding **claim 11**, Morewitz teaches an apparatus 100, but fail to teach the recognition module.

Lert Jr. et al. (Lert) teaches a radio [Fig. 1, abstract] comprising a recognition module 34 having a set of stored audio signatures to recognize an incoming radio signal [ the audio signature extraction 34 is input enabled by event detector 38 to extract audio signature from the digitized audio in col. 4, lines 4-12, & compare with the stored reference signature in data base 62 in col. 4, lines 43-68], in order to identify a broadcast program [col. 3, lines 5-15]. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to upgrade Morewitz with Lert's audio signature extraction, in order to identify a broadcast program.

Regarding **claim 21**, Morewitz teaches an apparatus 100 for processing multiple radio signals simultaneously [abstract, col. 1, lines 57-65], said apparatus 100 comprising

(a) a radio receiver [Fig. 1] module having at least two radio receivers [104, 106, 102], each receiver capable of continuously receiving a separate unrelated radio signal [ abstract, Fig.1, the 104 continuously receiving, searching for, separate unrelated radio signal to be matched to user criteria while 106 tracking a different radio station col. 5, line 45 to col. 6, line 8];

(b) a storage module [112, 114] having a capacity to simultaneously store in a buffer each radio signal received by the radio receiver module for later output by selection of a user [ storages 112, 114 for simultaneously storing RDBS data from 104, 106 & transferring to long term RAM 120 for recall later in col. 4, lines 8-19; col. 5, lines 22-26], and

Morewitz taught the search & identifying, matching, the RDBS date, program, type, text code for the user previously entered criteria preference [ col. 4, lines 20-50 & col. 1, lines 31-33], but fails to teach the stored audio signatures.



Art Unit: 2685

Lert teaches (c) a recognition module [60, Fig. 2, integrated to 10] having a set of stored audio signatures [reference signature data base 62, 64] to recognize an incoming radio signal [col. 4, lines 43-68], in order to identify a broadcast program [col. 3, lines 5-15]. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to upgrade Morewitz with Lert's audio signature extraction, in order to identify a broadcast program.

6. Claims 12-15, 18, 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morewitz in view of Tuoriniemi et al. (US 5,978,689).

Regarding **claim 12**, Morewitz teaches an apparatus 100 & a IR receiver 134, but fails to teach the further comprising a communication module.

Tuoriniemi et al. (Tuoriniemi) teaches the communication module transmitter 58, receiver 60 & associated circuit of a cellular telephone in Fig. 3, connected to an audio device 68 [Fig. 5, col. 7, line 61 to col. 8, line 4], the audio device 68 can be a digital radio [col. 15, lines 33-35], in order to listen to an audio program while awaiting a telephone call [col. 6, lines 44-54]. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to upgrade Morewitz with Tuoriniemi's transmitter, receiver, of a telephone which is provided to a digital radio, in order to listen to an audio program while awaiting a telephone call.

Regarding **claim 13**, Morewitz teaches an apparatus 100. Tuoriniemi teaches the, wherein the communication module comprises a telephone signal receiver 60 [Fig. 3], an output signal override device [switch 124, 126, 49] and an audio output device speakers 18, 20 & 92],

wherein said output from said storage module [ audio device 68 can be CD player in col. 1, lines 36-40 ] audio output sent to the audio output device, and the override device replaces the audio output with the telephone signal [ microprocessor 49 switches to received telephone audio on line 53 via switch 38, & disconnect audio on line 59, col. 9, lines 1-22, Fig. 6].

Regarding **claim 14**, Morewitz teaches an apparatus 100. Tuoriniemi teaches the wherein the communication module further comprises a message receiver means [ receiver means in 22] functioning to receive a personal message addressed to a user [ message "MOM CALLING", col. 11, lines 11, line 50 to col. 12, line 14].

Regarding **claim 15**, Morewitz teaches an apparatus 100. Tuoriniemi teaches the wherein the communication module further comprises a message transmission means transmitter 58, microphone 16 of the headset 10] functioning to send a message [ col. 9, lines 13-16].

Regarding **claim 18**, Morewitz teaches an apparatus 100. Tuoriniemi teaches the wherein the communication module [ pager or cellular telephone] further comprises a database receiver 60, the control module further comprises a user preference scheme means functioning to provide the user with an output based on the user's preference scheme [ the microcontroller 49 received user preference voice command, "CALL TOM" or "95.5 WPLJ", to be stored, or remove, or updated, in a memory, col. 12, lines 33-42].

Regarding **claim 22**, Morewitz teaches an apparatus 100 for processing multiple radio signals simultaneously [abstract, col. 1, lines 57-65], said apparatus 100 comprising

(a) a radio receiver [Fig. 1] module having at least two radio receivers [104, 106, 102], each receiver capable of receiving a separate radio signal [ abstract, Fig.1, the 104

Art Unit: 2685

continuously receiving, searching for, separate unrelated radio signal to be matched to user criteria while 106 tracking a different radio station col. 5, line 45 to col. 6, line 8];

(b) a storage module [112, 114] having a capacity to simultaneously store a portion of each radio signal received by the radio receiver module [ storages 112, 114 for simultaneously storing RDBS categorical portions of data & comparing from receivers 104, 106 & transferring to long term RAM 120 for recall later in col. 4, lines 8-19; col. 5, lines 22-26]. Morewitz fails to teach the communication module.

Tuoriniemi teaches (c) a communication module [transmitter, receiver of cellular telephone 22]; wherein the communication module comprises a telephone signal receiver 60, an output signal override device [switch 38 & controller 49] and an audio output device [headset speaker 18 or 20] ,

wherein said output from said storage module [68, CD player or digital radio] is an audio output sent to the audio output device,[18, 20] and the override device replaces the audio output with the telephone signal [ the replacing audio output from switch 38 from line 59 for audio device, to line 53 for the audio signal from receiver 60, col. 9, lines 1-22], in order to listen to an audio program while awaiting a telephone call [col. 6, lines 44-54]. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to update Morewitz with Tuoriniemi's transmitter, receiver, of a telephone which is provided to a digital radio, in order to listen to an audio program while awaiting a telephone call.

Regarding **claim 23**, Morewitz teaches an apparatus 100 for processing multiple radio signals simultaneously [abstract, col. 1, lines 57-65], said apparatus 100 comprising

(a) a radio receiver [Fig. 1] module having at least two radio receivers [104, 106, 102], each receiver capable of continuously receiving a separate unrelated radio signal [ abstract, Fig.1, the 104 continuously receiving, searching for, separate unrelated radio signal to be

Application/Control Number: 10/645,928

Art Unit: 2685

matched to user criteria while 106 tracking a different radio station col. 5, line 45 to col. 6, line 8];

(b) a storage module [112, 114] having a capacity to simultaneously store in a buffer each radio signal received by the radio receiver module for later output by selection of a user [storages 112, 114 for simultaneously storing RDBS data from 104, 106 & transferring to long term RAM 120 for recall later in col. 4, lines 8-19; col. 5, lines 22-26].

Morewitz fails to teach the communication module.

Tuoriniemi teaches (c) a communication module [cellular telephone in Fig. 5-6] wherein the communication module further comprises a message receiver means 60 functioning to receive a personal message addressed to a user [ message "MOM CALLING", col. 11, lines 11, line 50 to col. 12, line 14], in order to listen to an audio program while awaiting a personal telephone call [col. 6, lines 44-54]. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to update Morewitz with Tuoriniemi's transmitter, receiver, of a telephone which is provided to a digital radio, in order to listen to an audio program while awaiting a personal telephone call.

Regarding **claim 24**, Morewitz teaches an apparatus 100 for processing multiple radio signals simultaneously [abstract, col. 1, lines 57-65], said apparatus 100 comprising

(a) a radio receiver [Fig. 1] module having at least two radio receivers [104, 106, 102], each receiver capable of continuously receiving a separate unrelated radio signal [ abstract, Fig.1, the 104 continuously receiving, searching for, separate unrelated radio signal to be matched to user criteria while 106 tracking a different radio station col. 5, line 45 to col. 6, line 8];

(b) a storage module [112, 114] having a capacity to simultaneously store in a buffer each radio signal received by the radio receiver module for later output by selection of a

Art Unit: 2685

user [storages 112, 114 for simultaneously storing RDBS data from 104, 106 & transferring to long term RAM 120 for recall later in col. 4, lines 8-19; col. 5, lines 22-26].

Morewitz fails to teach the communication module.

Tuoriniemi teaches (c) a communication module [cellular telephone in Fig. 5-6]; wherein the communication module further comprises a message transmission means functioning to send a message [transmitter 58, LO 62, switch 40, microphone 94, 16, & associated circuitry in Fig. 5; col. 9, lines 13-16], in order to listen to an audio program while awaiting a telephone call for conversation [col. 6, lines 44-54]. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to update Morewitz with Tuoriniemi's transmitter, receiver, of a telephone which is provided to a digital radio, in order to listen to an audio program while awaiting a telephone call for conversation.

6. Claims 16-17, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morewitz in view of Clayton et al. (US 6,725,022 B1).

Regarding **claim 16**, Morewitz teaches the apparatus 100, but fails to teach the use history tracking means.

Clayton et al. (Clayton) teaches a use history tracking means functioning to track a use of the apparatus [the gateway 30, gateway transceiver 130, to track the customer billing information, to retrieve, access, previously stored information & customer profile, to track the use of the apparatus via billing information, col. 6, lines 26-37], in order to provide personal custom information service. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to upgrade Morewitz with Clayton's billing information from gateway receiver, in order to provide personal custom information service.

Regarding **claim 17**, Morewitz teaches the apparatus 100, but fails to teach the communication module. Clayton teaches the communication module [transceiver 130, The apparatus of claim 12, wherein the communication module further comprises a control module programmable selection scheme parameter receiver [ the remotely configure the multimedia device 20 using gateway network 30 database to download information about all audio formats & audio broadcasters for user to select desired formats and stations, as the programmable selection scheme parameter receiver of transceiver 130, col. 6, line 63 to col.7, line 3], using the same reasoning of combining to Morewitz.

Regarding **claim 25**, Morewitz teaches an apparatus 100 for processing multiple radio signals simultaneously [abstract, col. 1, lines 57-65], said apparatus 100 comprising

(a) a radio receiver [Fig. 1] module having at least two radio receivers [104, 106, 102], each receiver capable of receiving a separate radio signal [ abstract, Fig.1, the 104 continuously receiving, searching for, separate unrelated radio signal to be matched to user criteria while 106 tracking a different radio station col. 5, line 45 to col. 6, line 8];

(b) a storage module [112, 114] having a capacity to simultaneously store a portion of each radio signal received by the radio receiver module [ storages 112, 114 for simultaneously storing RDBS categorical portions of data & comparing from receivers 104, 106 & transferring to long term RAM 120 for recall later in col. 4, lines 8-19; col. 5, lines 22-26]. Morewitz fails to teach the communication module.

Clayton et al. (Clayton) teaches (c) a communication module [gateway transceiver 130 in Fig. 2, col. 8, lines 29-56]; said communication module further comprising a use history tracking means functioning to track a use of the apparatus [ the utilizing gateway 30, gateway 130, to track the customer billing information, to retrieve, access, previously stored information & customer profile, to track the use of the apparatus via billing information, col.

Art Unit: 2685

6, lines 26-37], in order to provide personal custom information service. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to upgrade Morewitz with Clayton's billing information from gateway receiver, in order to provide more services such as the personal information.

Regarding **claim 26**, Morewitz teaches an apparatus 100 for processing multiple radio signals simultaneously [abstract, col. 1, lines 57-65], said apparatus 100 comprising

(a) a radio receiver [Fig. 1] module having at least two radio receivers [104, 106, 102], each receiver capable of continuously receiving a separate unrelated radio signal [ abstract, Fig.1, the 104 continuously receiving, searching for, separate unrelated radio signal to be matched to user criteria while 106 tracking a different radio station col. 5, line 45 to col. 6, line 8];

(b) a storage module [112, 114] having a capacity to simultaneously store in a buffer each radio signal received by the radio receiver module for later output by selection of a user [storages 112, 114 for simultaneously storing RDBS data from 104, 106 & transferring to long term RAM 120 for recall later in col. 4, lines 8-19; col. 5, lines 22-26].

Morewitz fails to teach the communication module.

Clayton et al. (Clayton) teaches(c) a communication module [gateway transceiver 130 in Fig. 2, col. 8, lines 29-56]; wherein the communication module further comprises a database receiver [receiver of the gateway transceiver 130], the control module [50, 90 in col. 8, lines 29-36] further comprises a user preference scheme means functioning to provide the user with an output [ the remotely configure the multimedia device 20 using gateway network 30 database to download information about all audio formats & audio broadcasters for user to select desired formats and stations, col. 6, line 63 to col.7, line 3], in order to provide accurate audio broadcast information to user via downloading. Therefore, It would have



Art Unit: 2685

been obvious to one of ordinary skill in the art at the time of invention to upgrade Morewitz with Clayton's downloading audio format, stations, in order to provide accurate audio broadcast information to user by downloading.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morewitz in view of Otsubo (US 4,953,212).

Regarding **claim 19**, Morewitz teaches the apparatus 100, but fails to teach the features for this claim.

Otsubo teaches a signal conditioning module means functioning to separate a vocal portion from an instrumental portion of the radio signal [ the removing vocal sounds from instrumental accompaniment and substituting the vocal sounds through microphone, abstract, col. 1, lines 5-15], in order to reuse the instrumental accompaniment as a back ground music without vocal sound [ col. 3, lines 13-20]. Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to upgrade Morewitz with Otsubo's removing of vocal sounds from instrument accompaniment, in order to reuse the instrumental accompaniment as a back ground music without vocal sound.

### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (571) 272-7889. The examiner can normally be reached on 8:00am-5:30pm.

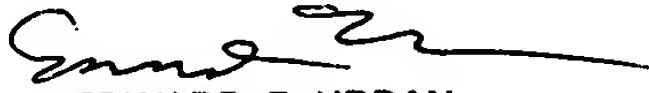
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the

Art Unit: 2685

organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow 陳先生

February 10, 2006.

  
EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600